

Claims

Sub B⁶
1. A process for the purification of a substance, wherein
- material containing the substance, and magnetic particles coated or treated with a reagent which binds the particles to the substance are dispensed in a first medium,
- a binding reaction is let to take place, in which reaction the substance is bound to the particles, and
- a magnetic probe is pushed into the medium, whereby the particles adhere to the probe, and the probe together with the particles and the substance bound to them is transferred to a second medium, and if desired, separated from the second medium
10 and transferred to a third medium,
characterized in that

- a surface tension releasing agent is dispensed at least on of the mediums, preferably at least to the first medium, and most preferably to all mediums, before the probe and the particles are transferred from it.

15 2. A method according to claim 1, wherein the surface releasing compound is a tenside, alcohol, protein, or a salt or carbohydrate.

3. A method according to claim 1 or 2, wherein the surface tension releasing compound is a tenside, such as a detergent.

20 4. A method according to claim 3, wherein the concentration of the tenside is 0.001 - 0.5% (w/v), preferably 0.005 - 0.1% (w/v), and most preferably 0.01 - 0.05% (w/v).

5. A method according to claim 1 or 2, wherein the surface tension releasing compound is a protein.

25 6. A method according to claim 5, wherein the concentration of the protein is 0.1 - 10% (w/v), preferably 0.25 - 5% (w/v), and most preferably 0.5 - 2% (w/v).

7. A method according to claim 1 or 2, wherein the surface tension releasing compound is a salt.

8. A method according to claim 7, wherein the concentration of the salt is 0.1 - 10 M, preferably 0.1 - 7 M.

30 9. A method according to any of ^{claim} ~~claims 1-8~~ for the purification of cells, viruses, subcellular organelles, proteins, or nucleic acid materials.

10. A method according to claim 9 for the purification of nucleic acid materials.

11. A method according to any of claims 1-10, wherein the size of magnetic particles is less than 50 μm , preferably 0.1 - 10 μm , and most preferably 1 - 5 μm .

12. A method according to any of claims 1-11, wherein the concentration of the magnetic particles is 0.01 - 5 mg/ml, preferably 0.05 - 3 mg/ml, and most preferably 0.2 - 2 mg/ml.

13. A method for separating magnetic particles by means of a magnetic probe from a medium, characterized in that a surface tension releasing agent is dispensed into the medium before the particles are separated.

10 14. A method for improving the adherence of magnetic particles from a liquid medium to a magnetic probe to be pushed into the medium, characterized in that a surface tension releasing agent is dispensed into the medium before the particles are adhered to the probe.

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